APPENDIX A
CODE OF FEDERAL REGULATIONS CITATIONS

I. Hazardous Organic NESHAP

40 CFR 63 Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.

40 CFR 63 Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.

40 CFR 63 Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.

II. NESHAP General Provisions

40 CFR 63 Subpart A - General Provisions.

III. NSPS for SOCMI Process Vents

40 CFR 60 Subpart III - Standards of Performance for Volatile Organic Compound Emissions (VOC) from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.

40 CFR 60 Subpart NNN - Standards of Performance for Volatile Organic Compounds Emissions (VOC) from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.

40 CFR 60 Subpart RRR - Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.

IV. Test Methods

40 CFR 60 Appendix A, Method 1 - Sample and velocity traverses for stationary sources.

40 CFR 60 Appendix A, Method 1A - Sample and velocity traverses for stationary sources with small stacks or ducts.

40 CFR 60 Appendix A, Method 2 - Determination of stack gas velocity and volumetric flow rate (Type S pilot tube).

40 CFR 60 Appendix A, Method 2A - Direct measurement of gas volume through pipes and small ducts.

40 CFR 60 Appendix A, Method 2C - Determination of stack gas velocity and volumetric flow rate in small stacks or ducts (standard pilot tube).

40 CFR 60 Appendix A, Method 2D - Measurement of gas volumetric flow rates in small pipes and ducts.

40 CFR 60 Appendix A, Method 3B - Gas analysis for the determination of emission rate correction factor or excess air.

40 CFR 60 Appendix A, Method 4 - Determination of moisture content in stack gases.

40 CFR 60 Appendix A, Method 18 - Measurement of gaseous organic compound emissions by gas chromatography.

40 CFR 60 Appendix A, Method 21 - Determination of volatile organic compounds leaks.

40 CFR 60 Appendix A, Method 25A - Determination of total gaseous organic concentration using a flame ionization analyzer.

40 CFR 60 Appendix A, Method 25D - Determination of the volatile organic concentration of waste samples.

40 CFR 60 Appendix A, Method 26 - Determination of hydrogen chloride emissions from stationary sources.

40 CFR 60 Appendix A, Method 26A - Determination of hydrogen halide and halogen emissions from stationary sources - isokinetic method.

40 CFR 63 Appendix A, Method 301 - Field validation of emission concentrations from stationary sources.

40 CFR 63 Appendix A, Method 304A - Determination of biodegradation rates of organic compounds (vent option).

40 CFR 63 Appendix A, Method 304B - Determination of biodegradation rates of organic compounds (scrubber option).

40 CFR 63 Appendix A, Method 305 - Measurement of emission potential of individual volatile organic compounds in waste.

V. Procedures

40 CFR 63 Appendix C - Determination of the fraction biodegraded (F_{bio}) in a biological treatment unit.

APPENDIX B
COMPARISON OF HON PROCESS VENT PROVISIONS WITH DISTILLATION, AIR OXIDATIONS, AND REACTOR NSPS

This Appendix summarizes the major differences between the HON process vent provisions and the SOCMI distillation, air oxidation, and reactors NSPS (40 CFR 60, Subparts NNN, III, and RRR, respectively). The comparison is organized into the following sections: applicability; control techniques; performance testing; monitoring; and recordkeeping and reporting.

Applicability

- The three NSPS apply only to new sources. A new distillation facility is defined as a facility for which construction, modification, or reconstruction commenced after December 30, 1983. A new air oxidation facility is defined as a facility for which construction, modification, or reconstruction commenced after October 21, 1983. The date for reactors is June 29, 1990.
- The NSPS apply to VOC's, while the HON applies to HAP's.
- The SOCMI chemical lists for the HON and the distillation, air oxidation, and reactor NSPS are different. The SOCMI list for the distillation, air oxidation, and NSPS can be found in 40 CFR §60.667, §60.617, and §60.707, respectively.
- The definition of a halogenated vent stream in the HON is any vent stream from a process vent or transfer operation determined to have a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater. The NSPS define a halogenated vent stream as one containing a total concentration of halogen compounds of 20 ppmv or greater.
- The TRE equations and coefficients are different for the HON and the NSPS. The coefficients in the NSPS are selected based on the flow rate, heat content, and halogen status of the vent stream. The coefficients in the HON are based on the halogen status of the vent stream and whether the facility is new or existing. The NSPS have separate equations for incinerators and flares. The TRE equations and coefficients for the air oxidation NSPS are located in 40 CFR §60.614(e), and the TRE equations and coefficients for the distillation and reactors NSPS are located in 40 CFR §60.664(e), and §60.704, respectively.
- The NSPS do not use the terms Group 1 and Group 2. However, the NSPS have similar applicability criteria to HON, because they only require control of streams with TRE index values less than or equal to 1.0. The distillation NSPS has a low flow cutoff. The reactors NSPS includes low flow and low concentration cutoffs.

Control Techniques

- In the NSPS, a scrubber is not required downstream of an incinerator that is used to combust halogenated vent streams (the NSPS only apply to VOC).
- The NSPS do not prohibit the use of flares for control of halogenated vent streams.
- There are no emissions averaging provisions in the NSPS.

Performance Testing

- The HON allows methods other than Method 18 to determine the concentration in the vent stream when complying with the 98 percent reduction or 20 ppmv outlet concentration requirements, or for purposes of calculating the TRE index value as long as the method has been validated by Method 301. The NSPS only specify Method 18.
- The distillation and air oxidation NSPS require Method 3 for measurement of percent oxygen when determining compliance with the 20 ppmv concentration limit. The reactors NSPS and the HON specify Method 3B.
- The HON and the reactors NSPS do not require an initial performance test for boilers or process heaters when the vent stream is introduced with the primary fuel or for permitted hazardous waste boilers. The distillation and air oxidation NSPS do not contain these exclusions.
- The NSPS do not allow the determination of TRE index value parameters by engineering assessment. The HON provisions allow the determination of TRE index value parameters by engineering assessment if the TRE index value is greater than 4.0.
- There are no initial tests required for scrubbers in the NSPS, because there are no scrubber provisions in the NSPS.
- The distillation and reactors NSPS require a performance test for all process vents with a TRE index value less than or equal to 8.0. The air oxidation NSPS and the HON require a test for all process vents with a TRE index value less than or equal to 4.0.

Monitoring

- The distillation and air oxidation NSPS do not exempt boilers or process heaters where the vent stream is introduced with the primary fuel from the monitoring requirements. The HON and the reactors NSPS contain these exemptions. The HON also exempts permitted hazardous waste boilers from monitoring, unlike the NSPS.
- The distillation and air oxidation NSPS require monitoring of operation for boilers or process heaters with design heat input capacities of 44 megawatts or greater. The HON and the reactors NSPS do not require any monitoring of such boilers.

- The distillation and reactors NSPS require monitoring for all process vent streams with a TRE index value less than or equal to 8.0. The air oxidation NSPS, like the HON, requires monitoring for all process vent streams with a TRE index value less than or equal to 4.0.

Recordkeeping and Reporting of Monitored Parameters

- The NSPS require semiannual reporting of monitored parameters that are outside the established range, but the out-of-range periods described in these reports are not considered violations. The facility may be required to repeat the performance test, and if the test shows that the facility is no longer in compliance, enforcement action could be taken. However, violations and penalties cannot be invoked based soley on monitored parameters being out of the established range. In contrast, the HON provisions specify that if parameters are out of range for a longer period of time than the excused excursion period, this is a direct violation of the permit operating requirements and enforcement actions can be taken.

- The NSPS require three hour averaging periods for records and reports of monitored data. The HON requires daily averaging periods (24 hour).

- The NSPS require performance tests to establish ranges of monitored parameters. The NSPS specifically define exceedances of monitored parameters which include limits above and/or below the performance test value of the parameter. For example, an exceedance for incinerators includes all 3 hour periods of operation during which the average combustion temperature was more than 28 ^{o}C below the value measured during the performance test. In contrast, the HON does not contain specific definitions of acceptable ranges or exceedances. The HON requires sources to establish site specific ranges based on testing supplemented by engineering analyses.

- The distillation and air oxidation NSPS require records of operation for boilers or process heaters with design heat input capacities of 44 megawatts or greater to be kept. These records may include steam use, fuel use, or data monitored to comply with another regulation. For the distillation and air oxidation NSPS, all periods when a boiler or process heater is not in operation must be reported in the semiannual report.

- The initial semiannual report is due within 6 months of the initial start-up date in order to comply with the NSPS. The HON requires the first semiannual report to be submitted no later than 8 months after the compliance date.

- The NSPS require that all records of monitored data be kept for 2 years. The HON requires that records be kept for 5 years.

Recordkeeping and Reporting - Initial Reports and Notifications

- The HON requires the compliance option that will be used, be reported in the operating permit or as specified by the permitting authority and a Notification of Compliance Status to report the results of the initial performance test. The NSPS require a notification of initial start-up and an initial performance test report.

- The NSPS require the results of the performance test to be submitted within 60 days of achieving the maximum production rate, but no later than 180 days after start-up. The HON requires the Notification of Compliance Status, which includes the results of the performance test, to be submitted 150 days after the source's compliance date.

- The NSPS require notification of the Administrator no later than 30 days after an affected facility is constructed or reconstructed. The Administrator must also be notified no later than 30 days prior to the initial start-up and no later than 15 days after the actual start-up of an affected facility. The HON (§63.151 of Subpart G) requires an initial notification which is due 120 days after the date of promulgation for existing sources. For new sources, the initial notification is due as soon as practicable before commencement of construction or reconstruction, or 90 days after promulgation, whichever is later. Additional notification requirements for new sources subject to the HON (such as applications for approval of construction or reconstruction and notifications of start-up) are contained in the NESHAP General Provisions (40 CFR 63, Subpart A).

- The distillation NSPS requires an initial report of the design production capacity of the process unit. The reactors NSPS requires a design capacity report for process units that are exempt from control requirements because they are below the 1 Gg/year capacity cutoff.

- When making a process change, the NSPS require a report of the compliance option to be used 90 days before the change is made if the compliance option will change.

- When making a process change, the NSPS require a performance test to be done within 180 days of the change.

APPENDIX C
EXAMPLE CALCULATION OF TRE INDEX VALUE

This Appendix summarizes the steps for calculating the TRE index value for a process vent stream and presents an example TRE index value calculation. Detailed requirements for calculating the TRE index value for a process vent stream are presented in §63.115(d) in Subpart G of the proposed HON rule.

The equation for calculating the TRE index value for a vent stream controlled by a flare or incinerator is as follows:

$$TRE = \frac{1}{E_{HAP}} \left[a + b\,(Qs) + c\,(H_T) + d\,(E_{TOC}) \right] \quad (1)$$

where:

TRE	=	TRE index value.
E_{HAP}	=	Hourly emission rate of total organic HAP (kilogram per hour).
Q_S	=	Vent stream flow rate (standard cubic meters per minute) at a standard temperature of 20 ^{o}C.
H_T	=	Vent stream net heating value (megaJoules per standard cubic meter).
E_{TOC}	=	Hourly emission rate of TOC (kilograms per hour minus methane and ethane).
a,b,c,d	=	Coefficients for existing and new source process vents presented in Tables 1 and 2.

Engineering assessment may be used to determine the total organic HAP emission rate, the volumetric flow rate, the net heating value, and the TOC emission rate for the representative operating condition expected to yield the lowest TRE index value. Engineering assessment includes, but is not limited to:

- Previous test results;
- Bench-scale or pilot-scale test data;
- Permit values; and
- Design analysis.

If the calculated TRE index value is greater than 4.0, the owner or operator is not required to perform any measurements. If the calculated TRE index value is less than or equal to 4.0, measurements and/or further calculations of the volumetric flow rate, the net heating value, and the TOC and total organic HAP emission rates must be performed. The volumetric flow rate shall be determined using Method 2, 2A,2C, or 2D. The molar composition, which is used to calculate net heating value, shall be determined using the following methods:

- Method 18 to measure the concentration of each organic compound;
- ASTM Method D1946-77 to measure the carbon monoxide and hydrogen concentration; and
- Method 4 to determine the water vapor content.

The net heating value shall be calculated using the following equation:

$$H_T = K_1 \left(\sum_{j=1}^{n} Cj\ Hj \right) (1 - Bws) \qquad (2)$$

where:

H_T = Net heating value of the sample (megaJoule per standard cubic meter).
K_1 = Constant, 1.740×10^{-7} (parts per million)-1 (gram-mole per standard cubic meter) (megaJoule per kilocalorie).
Bws = Water vapor content of the vent stream, proportion by volume.
Cj = Concentration on a dry basis of all organic compounds j (parts per million).
Hj = Net heat of combustion of compound j (kilocalorie per gram-mole).

The emission rate of TOC and the emission rate of total organic HAP shall both be calculated using the following equation:

$$E = K_2 \left(\sum_{j=1}^{n} Cj\ Mj \right) Qs \qquad (3)$$

where:

E = Emission rate of TOC or total organic HAP in the sample (kilograms per hour).
K_2 = Constant, 2.494×10^{-6} (parts per million)$^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour).
Cj = Concentration on a dry basis of organic compound j (parts per million).
Mj = Molecular weight of organic compound j (gram/gram-mole).
Qs = Vent stream flow rate (dry standard cubic meter per minute) at a temperature of 20 ^{o}C.

TABLE 1. COEFFICIENTS FOR TOTAL RESOURCE EFFECTIVENESS FOR EXISTING SOURCE NONHALOGENATED AND HALOGENATED VENT STREAMS

		Values of Coefficients			
Type of Stream	Control Device Basis	a	b	c	d
Nonhalogenated	Flare	1.935	3.660×10^{-2}	-7.687×10^{-3}	-7.333×10^{-4}
	Thermal Incinerator 0 Percent Heat Recovery	1.492	6.267×10^{-2}	3.177×10^{-2}	-1.159×10^{-3}
	Thermal Incinerator 70 Percent Heat Recovery	2.519	1.183×10^{-2}	1.300×10^{-2}	4.790×10^{-2}
Halogenated	Thermal Incinerator and Scrubber	3.995	5.200×10^{-2}	-1.769×10^{-3}	9.700×10^{-4}

TABLE 2. COEFFICIENTS FOR TOTAL RESOURCE EFFECTIVENESS FOR NEW SOURCE NONHALOGENATED AND HALOGENATED VENT STREAMS

		Values of Coefficients			
Type of Stream	Control Device Basis	a	b	c	d
Nonhalogenated	Flare	0.5276	0.0998	-2.096×10^{-2}	-2.000×10^{-4}
	Thermal Incinerator 0 Percent Heat Recovery	0.4068	0.0171	8.664×10^{-2}	-3.162×10^{-4}
	Thermal Incinerator 70 Percent Heat Recovery	0.6868	3.209×10^{-2}	3.546×10^{-3}	1.306×10^{-2}
Halogenated	Thermal Incinerator and Scrubber	1.0895	1.417×10^{-2}	-4.822×10^{-4}	2.645×10^{-4}

For nonhalogenated vent steams, the TRE index value must be calculated using the coefficients for a flare, a thermal incinerator with zero percent heat recovery, and a thermal incinerator with 70 percent heat recovery. The lowest TRE index value must be selected. For halogenated vent streams, the TRE index value must be calculated using the coefficients for a thermal incinerator with zero percent heat recovery followed by a scrubber.

Example

- Existing source.
- Process knowledge was used to determine that the vent stream is nonhalogenated.
- Engineering assessment was used to determine that flow rate = 1.66 scmm.
- The process vent stream contains xylene as the only organic compound.

The TOC and HAP emission rates are determined using equation 3 as follows:

- The molecular weight of xylene = 106 g/gmol.
- Engineering assessment was used to determine that the TOC concentration in the vent stream is 3000 ppm and, because xylene is a HAP, the HAP concentration is also 3000 ppm.

$$E_{TOC}\ (kg/hr) = (2.494 \times 10^{-6})\ (3000)\ (106)\ (1.66)$$
$$= 1.32\ kg/hr$$
$$E_{HAP}\ (kg/hr) = (2.494 \times 10^{-6})\ (3000)\ (106)\ (1.66)$$
$$= 1.32\ kg/hr$$

The heating value is calculated using equation 2 as follows:

- The net heat of combustion of xylene is 666.2 kcal/gmol.
- The water vapor content of the vent stream is 1 percent by volume (assumed).
- The total organic compound concentration is used (3000 ppm).

$$H_T\ (MJ/scm) = (1.740 \times 10^{-7})\ [(3000)\ (666.2)]\ (1 - 0.01) \quad (4)$$
$$= 0.344\ MJ/scm$$

The TRE index value calculation must be performed using equation 1 and the coefficients for existing, nonhalogenated vent streams presented in Table 1 for a flare, a thermal incinerator with zero percent heat recovery, and a thermal incinerator with 70 percent heat recovery.

Flare Calculation:

$$\frac{1}{.32}\ [\ 1.935 + 0.3660\ (1.66) - 0.007687\ (0.344) - 0.000733 \quad (5)$$

92

Similar calculations done for thermal incinerators with zero percent and 70 percent heat recovery yield the following results:

Zero percent heat recovery, TRE = 1.22

Seventy percent heat recovery, TRE = 1.97
Therefore, the TRE index value = 1.22 (The lowest of the three values must be selected.)

Since the TRE index value is less than 4.0, tests must be performed to determine the volumetric flow rate and the molar composition, including the concentration of each organic compound, the concentration of carbon monoxide and hydrogen, and the water vapor content.

APPENDIX D
INFORMATION ON WASTEWATER TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS

This appendix contains copies of 4 tables (Tables 15, 17, 18, and 19) from Subpart G of the HON. The tables specify the information that must be submitted with the Notification of Compliance Status.

TABLE D-1. INFORMATION ON TABLE 8 AND/OR TABLE 9 COMPOUNDS TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS FOR PROCESS UNITS AT NEW AND/OR EXISTING SOURCES[a,b]

Process Unit Identification Code[c]	Stream Identification Code	VOHAP Concentration (ppmw)[d,e] Average	Flow Rate (lpm)[e,f]	Group 1 or Group 2[g]	Compliance Approach[h]	Treatment Process(es) Identification	Waste Management Unit(s) Identification[j]	Intended Control Device

[a] The information specified in this table must be submitted; however, it may be submitted in any format. This table presents an example format.

[b] Other requirements for the Notification of Compliance Status are specified in §63.152(b) of Subpart G.

[c] Also include a description of the process unit (e.g., benzene process unit).

[d] Except when §63.132(e) is used, annual average concentration, as specified in 63.132(c) or (d) and §63.144.

[e] When §63.132(e) is used,indicate the wastewater stream is a designated Group 1 wastewater stream.

[f] Except when §63.132(e) is used, annual average flow rate as specified in 63.132(c) or (d) and in §63.144.

[g] Indicate whether stream is Group 1 or Group 2. If group 1, indicate whether it is Group 1 for Table 8 or Table 9 Compounds or for both Table 8 and Table 9 compounds.

[h] Cite §63.138 compliance option used.

TABLE D-2. INFORMATION FOR TREATMENT PROCESSES TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS[a,b]

Treatment Process Identification[c]	Description[d]	Wastewater Stream(s) Treated[e]	Monitoring Parameters[f]

[a] The information specified in this table must be submitted; however, it may be submitted in any format. This table presents an example format.

[b] Other requirements for the Notification of Compliance Status are specified in §63.152(b) of Subpart G.

[c] Identification codes should correspond to those listed in Table 15.

[d] Description of treatment process.

[e] Stream identification code for each wastewater stream treated by each treatment unit. Identification codes should correspond to entries listed in Table 15.

[f] Parameter(s) to be monitored or measured in accordance with Table 12 and §63.143 of this Subpart.

TABLE D-3. INFORMATION FOR WASTE MANAGEMENT UNITS TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS[a,b]

Waste Management Unit Identification[c]	Description[d]	Wastewater Stream(s) Received or Managed[e]

[a] The information specified in this table must be submitted; however, it may be submitted in any format. This table presents an example format.

[b] Other requirements for the Notification of Compliance Status are specified in §63.152(b) of Subpart G.

[c] Identification codes should correspond to those listed in Table 15.

[d] Description of waste management unit.

[e] Stream identification code for each wastewater stream received or managed by each waste management unit. Identification codes should correspond to entries listed in Table 15.

TABLE D-4. INFORMATION ON RESIDUALS TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS[a,b]

Residual Identification[c]	Residual Description[d]	Wastewater Stream Identification[e]	Treatment Process[f]	Fate[g]	Control Device Identification Code	Control Device Description[h]	Control Device Efficiency[i]

[a] The information specified in this table must be submitted; however, it may be submitted in any format. This table presents an example format.

[b] Other requirements for the Notification of Compliance Status are specified in §63.152(b) of Subpart G.

[c] Name or identification code of residual removed from Group 1 wastewater stream.

[d] Description of residual (e.g., steam stripper A-13 overhead condensates).

[e] Identification of stream from which residual is removed.

[f] Treatment process from which residual originates.

[g] Indicate whether residual is sold, returned to production process, or returned to waste management unit or treatment process; or whether HAP mass of residual is destroyed by 99 percent.

[h] If the fate of the residual is such that the HAP mass is destroyed by 99 percent, give description of device used for HAP destruction.

[i] If the fate of the residual is such that the HAP mass is destroyed by 99 percent, provide an estimate of control device efficiency and attach substantiation in accordance with §63.146(b)(9) of Subpart G.

APPENDIX E
CONVERSION FACTORS

HON INSPECTION TOOL CONVERSION TABLE

	Metric Units given in the Rule	English Units
Numbers used in Process Vent Provisions	0.005 standard cubic meter per minute (scmm) 0.45 kilogram per hour (kg/hr) 44 megawatts (MW)	0.18 standard cubic foot per minute (scfm) 0.99 pound per hour (lb/hr) 59,000 horsepower (hp) 150 million Btu per hour (MMBtu/hr)
Numbers used in Transfer Provisions	650,000 liters per year (l/yr) 10.3 kilopascals (kPa) 11.8 million liters/year (l/yr) 0.45 kilogram per hour (kg/hr) 44 megawatts (MW)	170,000 gallons per year (gal/yr) 1.49 pounds per square inch (psi) 3.12 million gallons per year (gal/yr) 0.99 pound per hour (lb/hr) 59,000 horsepower (hp) 150 million Btu per hour (MMBtu/hr)

HON INSPECTION TOOL CONVERSION TABLE

	Metric Units given in the Rule	English Units
Numbers used in Storage Vessel Provisions	151 cubic meters (m^3)	39,900 gallons (gal)
	0.7 kilopascal (kPa)	0.1 pound per square inch (psi)
	38 cubic meters (m^3)	10,000 gallons (gal)
	13.1 kilopascals (kPa)	1.90 pounds per square inch (psi)
	5.2 kilopascals (kPa)	0.75 pound per square inch (psi)
	75 cubic meters (m^3)	20,000 gallons (gal)
	21.2 square centimeters (cm^2) per meter of vessel diameter	1.00 square inches (in^2) per foot of vessel diameter
	1.27 centimeters (cm)	0.500 inch (in)
	61 centimeters (cm)	24.0 inches (in)
	212 square centimeters (cm^2)	32.9 square inches (in^2)
	3.81 centimeters (cm)	1.50 inches (in)
	44 megawatts (MW)	59,000 horsepower (hp) 150 million Btu per hour (MMBtu/hr)

HON INSPECTION TOOL CONVERSION TABLE

	Metric Units given in the Rule	English Units
Numbers used in Wastewater Provisions	5 meters (m)	16 feet (ft)
	0.04 kilogram (kg) steam per liter (*l*) of wastewater	0.3 pound (lb) steam per gallon (gal) of wastewater
	44 megawatts (MW)	59,000 horsepower (hp) 150 million Btu per hour (MMBtu/hr)
	95 degrees Celsius (°C)	200 degrees Fahrenheit (°F)
	67,100 liters/hour/m^2	1650 gallons/hour/ft^2
	0.1 cubic meter (m^3)	26 gallons (gal)
	0.42 cubic meter (m^3)	110 gallons (gal)
	6.7 square centimeters per meter (cm^2/m) of separator wall perimeter	0.32 square inch per foot (in^2/ft) of separator wall perimeter
	1.3 centimeters (cm)	0.51 inch (in)
	67 square centimeters per meter (cm^2/m)	3.2 square inches per foot (in^2/ft)
	3.8 centimeters (cm)	1.5 inches (in)

SI/English Conversion Factors:

1 meter (m) = 3.2808 feet (ft)
2.54 centimeters (cm) = 1 inch (in)
1 liter(*l*) = 0.2642 gallon (gal)
1 cubic meter (m^3) = 264.2 gallons (gal)
1 kilopascal (kPa) = 0.1450 pound per square inch (psi)
1 kilograms (kg) = 2.2046 pounds (lb)
1 megawatt (MW) = 1341 horsepower (hp) = 3.4122 million Btu/hr (MMBtu/hr)